IN THE CLAIMS

Please amend claims 1, 7, and 13-15 as set forth below.

Please cancel claim 3.

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1. (Currently Amended) Optical component mounting and interconnect apparatus comprising:

an electrically insulated base ~~including at least one layer of insulating material~~ with ~~at least one via extending through the one layer, the base including~~ first and second opposed major surfaces;

a signal via and a ground via positioned adjacent to each other in the base and extending through the base between the first and second opposed major surfaces, the signal via and the ground via each containing electrically conductive material forming electrical conductors from the first major surface to the second major surface, and the ground via being connected to ground, whereby the signal via and the ground via form a transmission line;

an optical component having an electrical terminal, the optical component mounted on the first major surface of the

base with the electrical terminal coupled to ~~one end of the at least one~~ the signal via; and

a flex circuit affixed to the second major surface of the base with an electrical connection to the signal via.

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2. (Original) Optical component mounting and interconnect apparatus as claimed in claim 1 wherein the base includes three spaced apart vias including a signal via and two ground vias parallel with and on opposite sides of the signal via, the signal via being coupled at one end to the electrical terminal of the optical component and at an opposite end to the flex circuit, and the two ground vias being connected to ground, whereby the signal via and two ground vias form a transmission line.

3. (Canceled).

4. (Original) Optical component mounting and interconnect apparatus as claimed in claim 1 wherein the base includes one of plastic, layered board, layered sheets of ceramic, solid ceramic, and semiconductor substrate.

5. (Original) Optical component mounting and interconnect apparatus as claimed in claim 1 wherein the optical component includes an edge emitting laser.

6. (Original) Optical component mounting and interconnect apparatus as claimed in claim 5 further including a lens block mounted on the first major surface of the base adjacent the edge emitting laser so as to receive light from the edge emitting laser and redirect the light in a direction substantially perpendicular to the first major surface.

7. (Currently Amended) Optical component mounting and interconnect apparatus comprising:

a base including at least one layer of insulating material defining first and second opposed major surfaces with a plurality of vias extending from the first major surface to the second major surface, the plurality of vias including a signal via having a first end in the first major surface and a second end in the second major surface and a ground via having a first end in the first major surface and a second end in the second major surface, the ground via being positioned adjacent the signal via so that the signal via and the ground via form a transmission line;

an optical component having an electrical terminal, the optical component mounted on the first major surface of the base with the electrical terminal affixed to the first end of the signal via; and

a flex circuit affixed to the second major surface of the base with an electrical connection to the second end of the signal via.

8. (Original) Optical component mounting and interconnect apparatus as claimed in claim 7 wherein the plurality of vias includes three spaced apart vias including the signal via and two ground vias parallel with and on opposite sides of the signal via, the two ground vias being connected to ground, whereby the signal via and two ground vias form a transmission line.

9. (Original) Optical component mounting and interconnect apparatus as claimed in claim 7 wherein the base includes one of plastic, layered board, layered sheets of ceramic, solid ceramic, and semiconductor substrate.

10. (Original) Optical component mounting and interconnect apparatus as claimed in claim 7 wherein the optical component includes an edge emitting laser.

11. (Original) Optical component mounting and interconnect apparatus as claimed in claim 10 further including a lens block mounted on the first major surface of the base adjacent the edge emitting laser so as to receive light from the edge emitting laser and redirect the light in a direction substantially perpendicular to the first major surface.

12. (Original) Component mounting and interconnect apparatus comprising:

a base including at least one layer of insulating material defining first and second opposed major surfaces with a plurality of vias extending from the first major surface to the second major surface, the plurality of vias including a signal via having a first end in the first major surface and a second end in the second major surface and two spaced apart ground vias parallel with and on opposite sides of the signal via, the two ground vias being connected to ground, whereby the signal via and two ground vias form a transmission line;

a component having an electrical terminal, the component mounted on the first major surface of the base with the electrical terminal affixed to the first end of the signal via; and

a circuit affixed to the second major surface of the base with an electrical connection to the second end of the signal via, whereby the transmission line communicates signals between the component and the circuit.

13. (Currently Amended) ~~Optical component~~ Component mounting and interconnect apparatus as claimed in claim 12 wherein the base includes one of plastic, layered board, layered sheets of ceramic, solid ceramic, and semiconductor substrate.

14. (Currently Amended) ~~Optical component~~ Component mounting and interconnect apparatus as claimed in claim 12 wherein the component includes an edge emitting laser.

15. (Currently Amended) ~~Optical component~~ Component mounting and interconnect apparatus as claimed in claim 14 further including a lens block mounted on the first major

surface of the base adjacent the edge emitting laser so as to receive light from the edge emitting laser and redirect the light in a direction substantially perpendicular to the first major surface.